

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (currently amended) A hard armor composite, comprising:

(a) a rigid facing; ~~and~~

(b) a lightweight ballistic fabric backing carried by said facing, and comprising an array of bundled high-performance fibers, said fibers having a tensile strength greater than 7 grams per denier and a denier per filament ratio of less than 5.4; and

(c) said hard armor composite having an areal density not greater than 5.1 psf, and increased ballistic resistance capable of defeating impacts from threats selected from a group consisting of:

i. NATO 7.62 x 51 mm —80 Ball at 2,750+50 feet per second;

ii. Soviet 7.62 mm x 54R Ball Type LPS at 2,300+50 feet per second;

and;

iii. U.S. 5.56 mm M855 Ball at 3,250+50 feet per second.

2. (original) A hard armor composite according to claim 1, wherein said fabric backing comprises a plurality of overlying fabric layers.

3. (original) A hard armor composite according to claim 2, wherein said fabric layers are laminated under heat and pressure to form a unitary ballistic structure.

4. (original) A hard armor composite according to claim 1, and comprising means for adhering said fabric backing to said facing.

5. (original) A hard armor composite according to claim 4, wherein said means for adhering comprises an adhesive selected from the group consisting of a thermoplastic polymer resin matrix and a thermosetting polymer resin matrix.

6. (original) A hard armor composite according to claim 4, wherein said means for adhering comprises a polymer film.

7. (original) A hard armor composite according to claim 4, wherein said means for adhering comprises an adhesive selected from the group consisting of an epoxy adhesive, a polysulfide adhesive, a polyurethane adhesive, a phenolic adhesive, a polyester adhesive, a polyvinyl butyral adhesive, a polyolefin adhesive, and a vinyl ester adhesive.

8. (original) A hard armor composite according to claim 1, wherein said facing is constructed of a material selected from the group consisting of ceramic, steel, glass, aluminum, titanium, and graphite.

9. (original) A hard armor composite according to claim 1, wherein said high-performance fibers are selected from the group consisting of aramid, ultra-high molecular weight

polyethylene (UHMWPE), poly {p-phenylene-2, 6-benzobisoxazole} (PBO), and poly {diimidazo pyridinylene (dihydroxy) phenylene} (M5).

10. (original) A hard armor composite according to claim 1, wherein said rigid facing comprising a generally flat, continuous monolithic plate.

11. (original) A hard armor composite according to claim 1, wherein said rigid facing and fabric backing have a combined thickness of less than 0.900-inches.

12. (cancelled)

13. (currently amended) A hard armor composite, comprising:

- (a) a ceramic facing; and
- (b) a lightweight ballistic fabric backing carried by said facing, and comprising an array of bundled high-performance fibers, said fibers having a tensile strength greater than 7 grams per denier and a denier per filament ratio of no more than 2.0; and
- (c) said hard armor composite having an areal density not greater than 5.1 psf, and increased ballistic resistance capable of defeating impacts from threats selected from a group consisting of:
 - i. NATO 7.62 x 51 mm —80 Ball at 2,750+50 feet per second;
 - ii. Soviet 7.62 mm x 54R Ball Type LPS at 2,300+50 feet per second;and;
 - iii. U.S. 5.56 mm M855 Ball at 3,250+50 feet per second.

14. (original) A hard armor composite according to claim 13, wherein said ceramic facing comprises a material selected from the group consisting of boron carbide, silicon carbide, titanium diboride, aluminum nitride, silicon nitride, sintered silicon carbide, sintered silicon nitride, and aluminum oxide.

15. (original) A hard armor composite according to claim 13, and comprising means for adhering said fabric backing to said ceramic facing.

16. (original) A hard armor composite according to claim 15, wherein said means for adhering comprises an adhesive selected from the group consisting of an epoxy adhesive, a polysulfide adhesive, a polyurethane adhesive, a phenolic adhesive, a polyester adhesive, a polyvinyl butyral adhesive, or a polyolefin adhesive, and a vinyl ester adhesive.

17. (original) A hard armor composite according to claim 13, wherein said ceramic facing comprises a generally flat, continuous monolithic plate.

18. (original) A hard armor composite according to claim 13, wherein said ceramic facing and fabric backing have a combined thickness of less than 0.900-inches.

19. (cancelled)

20. (original) A hard armor composite according to claim 13, wherein said high-performance fibers are selected from the group consisting of aramid, ultra-high molecular weight polyethylene (UHMWPE), poly {p-phenylene-2, 6-benzobisoxazole} (PBO), and poly {diimidazo pyridinylene (dihydroxy) phenylene} (M5).